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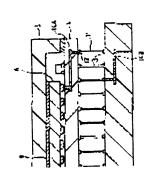
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(54) SEMICONDUCTOR DEVICE

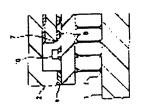
(57)Abstract:

PURPOSE: To protect a connection part between a lead and a package against breakage by a method wherein the deformation strength of the lead which connects a package provided with a semiconductor chip inside it to an electrode is made smaller than the joining strength of a joint between the lead and the electrode.



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CONSTITUTION: A large number of electrodes 3 connected to a multilayered wiring 14B provided inside a printed wiring board 1 are arranged on the surface of the printed wiring board 1 at a prescribed interval. A microchip carrier 2 is possessed of a package structure composed of an insulating board 4 and a cap 5 and a semiconductor chip 6 is



hermetically enveloped in the carrier 2. A large number of electrodes 8 are arranged in gridirons on the whole underside of the board 4 and connected to the upper electrodes 3 through the intermediary of a wiring 14A which runs through the inside of the insulating board 4. The upper ends of lead pins 11 are joined to the lower electrodes 8 of the board 4 through the intermediary of bonding agent 12, and the lower ends of the pins 11 are connected to the electrodes 3 through the intermediary of solders 13. The lead pin 11 is so designed as to make its bending strength to a compression load applied in an axial direction smaller than both the bonding strengths of the bonding agent 12 and the solder 13.

LEGAL STATUS

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